

# Sealaska Corporation

RENEWABLE ENERGY FEASIBILITY STUDY

Sealaska Project Manager: Russell Dick

Technical Contact: Bob Lynette

October 2004





One of 13 Alaska
 Native regional
 corporations created
 under the Alaska Native
 Claims Settlement Act

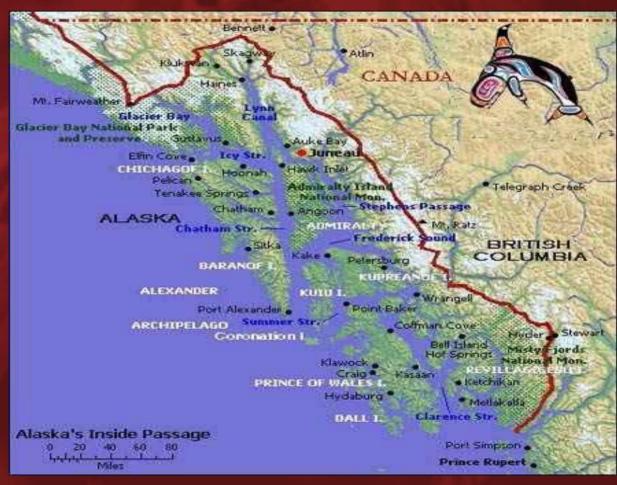
Represent over 17,000 shareholders, approximately half of whom reside in SE Alaska

Regional corporation for SE Alaska, which includes 12 village/urban corporations





## Study Area – Southeast Alaska 12 Alaska Native Villages







## **Participants**

Project Participant	Contact	Role		
Sealaska	Russell Dick,	Project manager		
Corporation	Michele Metz	Assistant Lands Manager		
Springtyme	Robert Lynette	Technical contact, wind		
Company, L. L. C.		consultant		
AP&T Solutions,	Bob Grimm,	Financial Analyst,		
LLC*	Larry Coupe	Engineer		
John Wade Wind	John Wade	Meteorologist, wind power		
Consultant LLC		analyst		
Northwest Wildlife	Karen Kronner	Biologist		
Consultants				
Met Tower Services	Mike Sailor	Wind tower installation		

<sup>\*</sup>A subsidiary of Alaska Power & Telephone Company





### **Project Overview**

### Objectives:

- ✓ Determine if deploying wind turbines and/or small hydro facilities make sense for the Sealaska villages that are currently using diesel fuel for power.
- ✓ If answer is positive, develop a business plan to implement development program(s).





• Collect feasibility reports for studies that have previously been conducted.

 Evaluate whether application of newer technology or construction methods could result in cost savings.



### Micro-hydro Study Results

### **Project Feasibility Summary**

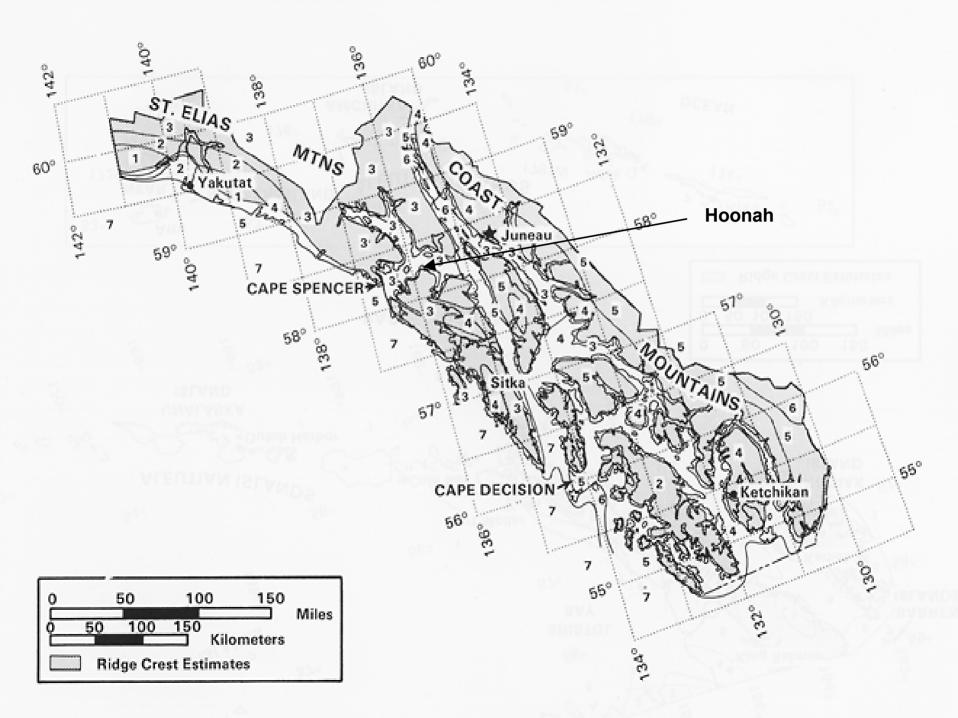
Community	Project	Construction Cost (\$2003)	Economic Feasibility	Environmental Feasibility
Angoon	Thayer Creek (1,000 kW)	\$8,700,000	Low	Moderate
Hoonah	Gartina Creek (600 kW)	\$3,750,000	Moderate	Moderate
	Water Supply Creek (600 kW)	\$3,330,000	Moderate	High
Hydaburg	Reynolds Creek (5,000 kW)	\$9,400,000	Low	High
Kake	Cathedral Falls Creek (800 kW)	\$5,300,000	Moderate	Moderate
Klukwan	Walker Lake (1,900 kW)	\$9,400,000	Low	Unknown
Yakutat	Chicago Harbor (1,400 kW)	\$9,300,000	Moderate	Unknown





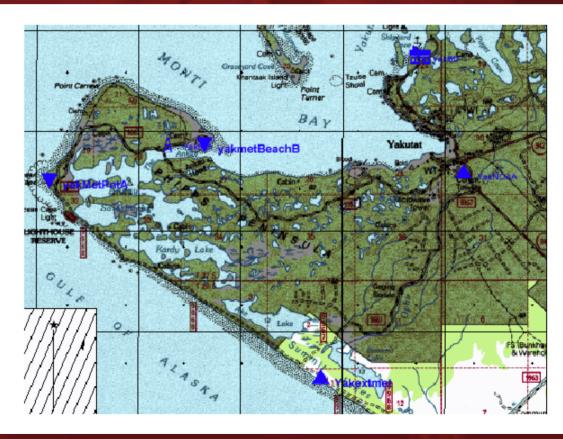
### Project Status - Wind

- Field trips conducted in July 2003. Two potential sites identified:
  - Yakutat
  - Hoonah
- Two anemometer towers installed at Yakutat 8/04
- Hoonah permitted; anemometry ordered, delivered to Juneau, and scheduled to be installed in next 30 days.





### Anemometer Sites













## Avoiding Moonwort Fern







### Yakutat Site #1







### Second Site at Yakutat







### Signs at Sites

#### **EXPERIMENTAL TEST STATION**

This station installed to see if wind power can lower Yakutat's electricity costs.

#### Done in conjunction with:

- YAK-TAT-KWAN, INC.
- YAKUTAT POWER
- U.S. DEPT. OF ENERGY

Please help protect this site. Report any damage to: Yakutat Power @ 784-3242

Thank You





Measure winds ~ one year

• If winds favorable, develop preliminary site layout and business plan.

